Muhammad Idrees

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Academic Background

M. S. in CS (Computer Science),   (3.27/4.00 CGPA) University of Agriculture Faisalabad, Pakistan 2016-2018

<u>Thesis Title:</u> *"Early Warning System of Traffic on Motorways of Pakistan with VANET (Wireless Adhoc Network)"*.

M.Sc. CS (Computer Science),   (2.79/4.00 CGPA) 2013-2016
Research Title: Artificial Intelligence and Machine Learning.
University of Agriculture Faisalabad, Pakistan.

Work Experience Software Application Developer	13-Jan-2022 to date

- **US-Pakistan** Center for Advanced Studies in Agriculture and Food Security, National Center for Genome Editing for crop improvement and human health (NCGE), University of Agriculture, Faisalabad, Pakistan.
- In this project, I am working on the design and Development of different software that needs to be developed and also handling many software that is used for Genome editing machines.

Data Scientist   13-Aug-2017 to 30-Aug-2021
- I used R/Python Programming for different analyses and statistical experiments as a data scientist.
- Use ANN, CNN, RCNN, GANN, MXnet, Deepnet neural net.
- Create econometrics, Agro-Economical Zones, and Crop Yield estimation for Crops.

Wireless Communications Engineer   01-Apr-2011 to 03-Apr-2016
- Install, maintain, and configure wireless equipment.
- Responsibilities were to:
  - Design and build custom applications. Design, plan, establish, and optimize wireless networks.
  - Design, plan, establish, and optimize wireless networks.
  - Develop wireless network infrastructures and make recommendations on systems enhancements for optimization.
  - Design and validate RF link performance, quality, and reliability.
  - Apply propagation theory, cellular theory, RF Engineering tools, and antenna theory to choose tower antenna placement.

Cisco Instructor   01-Dec-2008 to 28-Feb-2010
- CCNA Certifications Training.
- Responsibilities were to:
  - Delivered training to students.

Technical Skills

RF Engineering, Wireless technologies, Machine Learning, Data Science, Data Visualization, R Programming, PHP Programming, Oracle Apex Programming.
• Knowledge of SAS and Other Analytical Tools, working with unstructured data, Statistics, and probability.
• Database management, cloud computing, spreadsheet programs, data extraction, transformation, and loading.

Participations (Workshops, Conferences, and courses)

- Served as a Resource person (Member Scientific Committee) in 1st and 2nd National hands-on training on CRISPR/CAS mediated Genome editing, organized by NCGE, at CAS-AFS-UAF.
- Awarded first prize in the poster competition at the International Wheat Conference 2022.
- Grand Challenges to Food Security Network Analysis using R (workshop 17/06/2022)
- Data Science for Agriculture & Food Security (Workshop 04/10/2022)
- Data Science with Python in Agriculture (Workshop 27-10-2022 to 29-10-2022)
- Climate Change Impact & solutions (International Conference 07-11-2022 to 09-11-2022).
- Crop Yield Estimation and water Accounting Using Remote Sensing (International Training Workshop)
- Application of Geospatial Techniques for Agriculture Resource Management (International Training Workshop).
- Mathematical Modeling Using Mathcad & Mathematica (Training Workshop).
- Food Security on Water Day using GIS (Workshop 30/03/2022).
- Application of Statistics for making decisions with precision in Agriculture, Industry, and Economic Development. (Workshop).

Certifications:

- CCNA (Cisco Certified Network Associate) **Verification ID: CSCO11933149**
- MCP (Microsoft Certified Professional) **(Certification Number: D495-3544)**
- Microsoft Office Certified

Extracurricular Activities

– Cooking, hiking, and gardening, animations.

Recommendations

Dr. Ahsan Raza Sattar (M.S CS Supervisor)
Assistant Professor,
Department of Computer Science,
University of Agriculture,
Faisalabad, Pakistan. 38000.
E-mail: Ahsan_raza@uaf.edu.pk
Phone No. +92 300 6600137

Dr. Iqrar Ahmad Rana (PI Tree domain NCGE)
In-charge Transformation Lab (CAS-AFS-UAF),
Centre of Agricultural Biochemistry and
Biotechnology (CABB), University of Agriculture,
Faisalabad, Pakistan.
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Dr. Imran Mumtaz (M.Sc. Co-Supervisor)
In-charge IT Department,
Department of Computer Science, University of
Agriculture Faisalabad, Pakistan.
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